

United States Patent and Trademark Office

W

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	· ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/554,277	10/20/2005	Helge Dykesteen	P17324 USPC	6560
29078 7590 10/16/2007 CHRISTIAN D. ABEL ONSAGERS AS POSTBOKS 6963 ST. OLAVS PLASS			EXAMINER	
			FULLER, ROBERT EDWARD	
			ART UNIT	PAPER NUMBER
NORWAY, N- NORWAY	.30	•	3676	
			MAIL DATE	DELIVERY MODE
			10/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)			
Office Action Summary		10/554,277	DYKESTEEN, HELGE			
		Examiner	Art Unit			
	•		3676			
•	The MAILING DATE of this communication app	Robert E. Fuller ears on the cover sheet we	1 1			
Period fo						
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAY IN THE MAILING	ATE OF THIS COMMUNION 36(a). In no event, however, may a rivil apply and will expire SIX (6) MON, cause the application to become AE	CATION. reply be timely filed ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).			
Status						
1) 🗌	Responsive to communication(s) filed on	_·				
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.					
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D). 11, 453 O.G. 213.			
Dispositi	ion of Claims					
4)⊠	☑ Claim(s) <u>1-18</u> is/are pending in the application.					
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
•	Claim(s) <u>1-18</u> is/are rejected.					
•	Claim(s) is/are objected to					
8)	Claim(s) are subject to restriction and/o	r election requirement.				
Applicati	ion Papers					
9)[The specification is objected to by the Examine	r.				
10)🖾	The drawing(s) filed on 20 October 2005 is/are:	a)∏ accepted or b)⊠ o	bjected to by the Examiner.			
	Applicant may not request that any objection to the	7 11				
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex	, -	* * · · · · · · · · · · · · · · · · · ·			
Priority (under 35 U.S.C. § 119					
•	Acknowledgment is made of a claim for foreign All b) Some * c) None of:		§ 119(a)-(d) or (f).			
	 Certified copies of the priority documents Certified copies of the priority documents 		application No.			
	3. Copies of the certified copies of the prior		• • • • • • • • • • • • • • • • • • • •			
	application from the International Bureau	•	· · · · · · · · · · · · · · · · · · ·			
* 5	See the attached detailed Office action for a list		received.			
Attachmen	• •					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)		Summary (PTO-413) s)/Mail Date			
3) 🔯 Infor	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date 01/04/2006.		nformal Patent Application			

Art Unit: 3676

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the connection between the wedge elements and the tension element must be shown or the feature(s) canceled from the claim(s). As currently illustrated, it is not apparent from the drawings how the wedge elements are connected to the tension element. No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3676

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 31. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

- 3. Claims 2-7, 9-16, and 18 are objected to because of the following informalities: The first word of these claims should be changed from "A" to --The--. Appropriate correction is required.
- 4. Claim 13 is objected to because of the following informalities: There is a lack of antecedent basis for "the U-shape." Appropriate correction is required.
- 5. Claim 14 is objected to because of the following informalities: There is a lack of antecedent basis for "the U-shaped arm portion (13)." Appropriate correction is required.
- 6. Claim 15 is objected to because of the following informalities: The "connecting elements (18)" are not positively introduced. Examiner suspects that this claim should

Art Unit: 3676

depend from claim 14, and is examining this claim as if it depends from claim 14.

Appropriate correction is required.

- 7. Claim 16 is objected to because of the following informalities: There appears to be lack of antecedent basis issues with this claim, as the connecting elements are never positively introduced. It appears that this claim should depend from claims 14 or 15, rather than claims 12 or 13. The claim is being examined as if it depended from claims 14 or 15. Appropriate correction is required.
- 8. Claims 17 and 18 are objected to because of the following informalities: These claims are not properly constructed as method claims. Appropriate correction is required. Examiner suggests amending these claims as follows:

A method for releasably supporting a pipe string during connection of a new pipe element to the pipe string, <u>comprising</u>;

characterized, in that for a lifting device choosing a tension element is chosen

which is adapted to the diameter of the pipe element of the pipe string that has to be supported,

that mounting a wedge device is mounted on the tension element,

Et cetera.

9. Claim 18 is objected to because of the following informalities: It appears that this claim should depend from claim 17 rather than claim 15, as claim 18 is directed to a method and claim 15 is directed to an apparatus. Appropriate correction is required.

Art Unit: 3676

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 8-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The limitation in claim 8 that the wedge device is "releasably attached to the tension element for lifting out of and into an active position" (lines 11 and 12) is confusing. The wedge devices (i.e. slip elements 31) are indeed releasably attached to the tension element, however, the slip elements are not lifted out of the active position by being disconnected from the tension element. It seems that "the tension element (14)" in line 12 should be changed to --an abutment element (4)-- because the wedge device is lifted out of the active position by being disconnected from the abutment element. The claims are being examined as best understood by the examiner. Appropriate clarification and correction is required.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 13. Claims 1-12, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Liljestrand (US 2,636,241).

Application/Control Number: 10/554,277

Art Unit: 3676

With regard to claim 1, Liljestrand discloses a system for supporting a pipe string (5) comprising at least one pipe element, comprising a lifting device, a wedge device (7, 40, 48) and an abutment element (6), characterized in that the lifting device comprises an attachment foundation (10, 15, 13), a lifting arm with an inner (11) and an outer (21) arm portion, which inner arm portion (11) is in linked connection with the attachment foundation (10, 15, 13) and a replaceable tension element (31) in the form of a circular arc connected to the outer arm portion (21), where the wedge device (7, 40, 48) is releasably secured to the tension element (31), thus enabling the wedge device (7, 40, 48) to be moved by means of the lifting device from an inoperative position in a position above the abutment element (see the solid-line configuration in figure 1) to an operative position where the wedge device (7, 40, 48) abuts against the abutment element (see the dashed-line configuration in figure 1), thus securing the pipe string (5) by means of the wedge effect.

With regard to claims 2 and 9, the outer arm is substantially u-shaped, and its open end faces away from the inner arm portion.

With regard to claim 3, the wedge device comprises a plurality of wedge elements connected individually to the tension element.

With regard to claim 4, the wedge elements completely encircle the pipe string in the active position (see figure 2).

With regard to claim 5, the tension element is releasably attached to the lifting arm.

Page 7 Application/Control Number: 10/554,277

Art Unit: 3676

With regard to claim 6, the attachment foundation is attached to the base (2), which is in turn connected to the abutment device (6), therefore the attachment foundation inherently comprises attachment devices for releasable attachment to the abutment element and base.

With regard to claim 8, Liljestrand discloses all of the limitations of this claim as discussed above in the rejection of claim 1, and further discloses that the tension element (31) is releasably and pivotally connected to the outer arm portion (see column 4, lines 24-27).

With regard to claim 10, the tension element comprises a ring in the shape of a circular arc, and the opening in the arc appears to be substantially equal to the pipe diameter (see figure 2).

With regard to claim 11, the length of the tension element is longer than the circumference of the pipe string.

With regard to claim 12, stoppers (22 and 23) are indirectly connected to the ends of the tension element.

With regard to claim 17, the method of using the device of Liljestrand comprises all of the claimed steps.

With regard to claim 18, the wedge elements (7, 40, 48) are inserted into recesses within the tension element (see figure 1).

Claim Rejections - 35 USC § 103

Art Unit: 3676

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 15. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liljestrand in view of Kelley (US 2,340,597).

Liljestrand discloses an abutment element (6) that appears to be a solid piece, but fails to disclose a split abutment element.

Kelley discloses a system for supporting a pipe string comprising an abutment element (3) that is split in half (see page 1, column 2, lines 30-38).

It would have been considered obvious to one of ordinary skill in the art, to have modified the apparatus of Liljestrand to have a split abutment element as taught by Kelley, in order to have enabled the abutment element to be removed and replaced while the wedge device was in the passive position and a pipe string was in place in the well, and furthermore because it has been held that constructing a formerly integral

Art Unit: 3676

structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman,* 168 USPQ 177, 179.

Allowable Subject Matter

16. Claims 13-16 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

- 17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references are examples of pipe supporting apparatuses which contain a lifting device, a wedge device, and an abutment device. Crickmer (US 3,513,511) shows a wedge assembly comprising wedge elements that are inserted onto a tension element.
- 18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert E. Fuller whose telephone number is 571-272-0419. The examiner can normally be reached on Monday thru Friday from 8:00 AM 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3676

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Supervisory Patent Examine

Art\Unit 3676

10/11/2007 REF